G.M. 1918

9.9.18

Sl. No. 1-13-14.

"Improvements in measuring Instruments Relays and the like"

G. R. S. IX-5]

Previous references.

File No. 99

1918.

(G. M)

Serial Nos. 1-13-11

Later references.

preserve B35/9.

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. 1-13

Part B for April 19

SUBJECT.

Improvements in measuring Instruments, Relays and the like

G-2271-3 dated 7-4-19

To
1. The Superintendent, Govt Museum
2. The Chief Engineer, Mysore.
3. The Registrar Mysore University Mysore

sl 14

Forwards copy of a specification of an invention for "Improvements in measuring Instruments, Relays & the like."

W D 1250—GPB—30,000 · 28-1-19

3/8/19 Mysore

G.R.S. 11] 1918.19

GENERAL AND REVENUE SECRETARIAT.

(l. m)

NOTES.

File No. 99-18

FILE HEADING.

Improvements in measuring Instruments, Relays and the like

From

Remfrey and Sons, Patent and Trademark Attorneys, Calcutta

No. nil Dated 30-7-1918 Received 8-8-18

Diary No. 2818	Enclos. 4 Spare Copies.	Serial No. 1

BRIEF ABSTRACT OF LETTER.

Forwards on behalf of Marconi's wireless Telegraph Company Ltd of Marconi House, Strand, London, W.C. 2. England, an application for leave to file a specification of an invention for "Improvements in Measuring Instruments, Relays and the like"

NOTES AND ORDERS.

The inventor is Harry Alexander Even who has assigned the right to "Marconi's wireless Telegraph Company Ltd". A power of Attorney granted by the Company to the Patent Agents at Calcutta is forwarded.

A fee of Rs 11-8-0, being the fee for stamp on Assignment

NOTES—First Sheet.

GPB—35,000—15-6-12

G. R. S. III-2]

General and Revenue Secretariat.

G. M File No. 99 of 1918-19

Serial No.	
	Power of Attorney and for authorising to file the specification has been received.
	~~A certified copy~~ The Govt. of India, ~~who have~~ * a certified copy thereof ~~accepted~~ the specification is also forwarded.
	Drafts to the Supt of Stamps, Bg Cant Dy Supt and the Registrar, Mysore University are put up.
1	OB 7.10.18
2	From the State Huzur Treasury Officer— No. 110 of 23.11.18. Acknowledges receipt of Rs 10/—
3	To The Registrar, Mysore University G. 7314 of 10.10.18. Forwards for the opinion of Mr Metcalfe the applcn: refd: to in ¶ 1.
4	To The Supt:dt: of Stamps, Bangalore G. 7315 of 10.10.18. Forwards the power of attorney refd: to in ¶ 1 for being impressed with the Mysore Stamp.
5	From the Superintendent, Stamps. Letter No. 109 of 16.11.18. Forwards the power of attorney refd: to in ¶ 4 duly impressed

NOTE—Contn. sheet.

WD A 1789—GPB—60,000—20-8-18—S.

G. R. S. 111-2]

General and Revenue Secretariat.

~~G.O.~~ 13521

G.M. File No. 99 of 1918.

Serial No.	
	impressed with the Mysore Stamps. The reply from the Registrar of the Mysore University has not yet been received. May the reply be awaited? A draft ~~letter~~ acknowledging the receipt of the ~~letter~~ power of Attorney is put up.
1	Yes
	Issue
	Sd/- 4/12
	Sd/- 28/11. Sd/-
6	To
	The Superintt: of Stamps. G.112/6 Dt 12-12-18
	Acknowledges the receipt of power of attorneys refd: to in 5
7	From
	The Registrar Mysore University Letter no 678 dated 7th February 1919
	With reference to at 3 forwards the opinion of Mr Metcalfe.
	Expert opinion is favourable. Submitted with the usual drafts. Dft's may be apld
	Sd/- 12-2-19 Sd/-
	Issue 12/2/19
	Second Member)
	Drafts approved
	Henceforward such applications may be referred to the Board of Ed: advice for opinion
	Read 14.2.19

4478-267
12-2-19

NOTE—Contin. sheet.

WD-A 1789—GNB—60,000—20-8-18—S.

G. R. S. III-2]

& 135-24

16876

General and Revenue Secretariat.

9m File No. 99 of 1918.

Serial No.	
8	To Marconi's Wireless Telegraph Co Ltd 28 Norfolk House Strand W.C. London, England G. 1810 Dft dt 21.2.1919 authorises the applicant referred to in No 1 to file a specification for the invention referred to in No 1.
9	To Messrs Remfry & Co Calcutta G. 1810-3 Dft dt 1.2.1919. Encl: Dft No 8 for being sent to the party concerned.
10	From Messrs Remfry and Co Calcutta Letter dt 19-3-19 Forwards Rs 30/- towards the filing fees of the above specification together with four copies thereof and requests that the certificate at the foot of the G.O. authorising them to file the specification may be duly filled in and forwarded. Submitted with the usual drafts. Money has been received and has been duly entered in the T.R.R. herewith put up. The application at the foot of the G.O. requires initials and signature 27-3-19

For B2

Mag S

NOTE—Contn. sheet.

29.3.19

G. R. S. III-2.

16876.

General and Revenue Secretariat.

G.M. File No. 99 of 1918.

Serial No.	
	From the Hutz: Ty: Officer -
11	Ty: Rl: No 147 of 31.3.1919.
	Acknowledges receipt of Rs 30/ refd: to in &10.
12.	To
	The Compiler Mysore Gazette.
	G. 22769 of 7.4.1919.
	Notifies the filing of the Specifn: of the invention refd: to in &c
13	To
	Messrs Remfry & Son Calcutta
	G. 22770 of 7.4.1919.
	Forwards a copy of &c 12 for being sent to the party concerned.
14.	To
	The Supdt: Govt Museum
	" Chief Engineer in Mysore
	" Registrar Mysore University
	G. 22771-3 of 7.4.19
	Forwards for record in his office a copy of the ~~same~~ Specification of the invention refd: to in &c

CHIEF SECRETARIAT.
IV
C R Deptt.
17 APR 1919

NOTE—Contn. sheet.

2218.

G.M. 99-18-
81:1

To REGISTERED.

THE ~~CONTROLLER OF PATENTS~~ SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE~~, GENL. & REV. DEPTS.,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

FROM

REMFRY & SON,
PATENT & TRADE-MARK ATTORNEYS,
CALCUTTA.

10719

Dated CALCUTTA, the 30th July 1918.

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats.(Genl)			

SIR,

re MARCONI'S WIRELESS TEL: CO.LD. (MYSORE)

(Brit. *No.* 107622 *dated* 30/6/16.)

We have the honour to forward herewith an Application of MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED, of Marconi House, Strand, London, W.C.2, England, Electricians, for leave to file a Specification under Part I of the Mysore Inventions and Designs Regulation, 1894, in respect of an Invention for "IMPROVEMENTS IN "MEASURING INSTRUMENTS, RELAYS AND THE LIKE", & solicit the favour of your submitting the same to H.H.the Dewan.

A Deed of Assignment from Harry Alexander Ewen in favour of the Applicant Company (Consideration Rs 5/-) and a Power of Attorney in favour of our Mr. Rupert Remfry, under which we are acting are also enclosed & we solicit the favour of your having such Assignment stamped -/8/- & Power of Attorney Re.1/- respectively.

The corresponding British Patent is No. 107622 dated 30/6/16 & a Certified Copy of the Printed Specification of such British Patent is enclosed.

A Post Office Order for Rs. 11/8/- is sent to-day.

We have the honour to be,
Sir,
Your very obedient servants,

REMFRY & SON

MYSORE APPLICATION.

3 Enclos:-
Applin.
P/A.
Asst.
By P.O.O:-
Rs. 11/8/-.
I.M.B.

P/O (Genl) 1,000—7-6-18 [4-2-14—17-3-11].

I Certify this, including the Drawing forming part thereof, to be a true Copy.

11 MAY.1918

Acting for Comptroller

Tyrone

1

PATENT SPECIFICATION

107,622

Application Date, June 30, 1916. No. 9246/16.

Complete Left, Jan. 2, 1917.

Complete Accepted, July 3, 1917.

Wth Comptrollers permission

PROVISIONAL SPECIFICATION.

Improvements in Measuring Instruments, Relays and the like.

We, MARCONI'S WIRELESS TELEGRAPH COMPANY, LIMITED, and HARRY ALEXANDER EWEN, both of Marconi House, Strand, London, W.C., Electricians, do hereby declare the nature of this invention to be as follows:—

The object of this invention is to provide an instrument in which the effect of small extensions or contractions in any material may be multiplied for the purpose of measuring the extension or contraction or the strength of the applied stress, or for the purpose of controlling another instrument.

According to our invention, we mount upon a spindle a radial arm, which is capable of rotational movement but is restrained from movement parallel to the axis of the spindle. The arm is subject to a controlling force, such as that of a spring, which tends to prevent movement in one direction round the axis and assists movement in the other direction. To the arm is connected one end of a filament, the other end of which is connected to one end of the piece of material of which we desire to measure the extension or contraction, the other end of said piece being fixed in such a manner that no appreciable movement between it and the bearing supporting the spindle is possible.

If the material contract or expand, the arm will turn about the axis, the point of attachment between the arm and the filament describing a circle, the centre of which lies in the axis of the spindle. This angular movement of the arm may be used to indicate the contraction or expansion of the material, or to indicate the temperature of the material, or the strength of an electric current flowing through and heating it; or to measure the force applied at the end of the filament which is attached to the material.

Or again; the movement of the arm may be employed to actuate a relay.

More than one filament may be employed.

For the purpose of regulating the sensitivity of the instrument it may be enclosed in a vessel which is open to the atmosphere: or this vessel may be either evacuated in order to increase the sensitivity, or filled with a conducting gas such as for instance, hydrogen, for the purpose of reducing or controlling the degrees of sensitivity.

Dated the 30th day of June, 1916.

CARPMAEL & Co.,
Agents for Applicants,
24, Southampton Buildings, London, W.C.

[Price 6d.]

COMPLETE SPECIFICATION.

Improvements in Measuring Instruments, Relays and the like.

We, MARCONI'S WIRELESS TELEGRAPH COMPANY, LIMITED, and HARRY ALEXANDER EWEN, both of Marconi House, Strand, London, W.C., Electricians, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement :—

The object of this invention is to provide an instrument in which the effect of small extensions or contractions in any material may be multiplied for the purpose of measuring the extension or contraction or the strength of the applied stress, or for the purpose of controlling another instrument.

According to our invention, we mount upon a spindle a radial arm, which is capable of rotational movement but is restrained from movement parallel to the axis of the spindle. The arm is subject to a controlling force, such as that of a spring or a weight, which tends to prevent movement in one direction round the axis and assists movement in the other direction. To the arm, or to another arm fast on the spindle, is connected one end of a filament, the other end of which is connected to one end of the piece of material of which we desire to measure the extension or contraction, the other end of said piece being fixed in such a manner that no appreciable movement between it and the bearing supporting the spindle is possible.

If the material contract or expand the arm will turn about the axis, the point of attachment between the arm and the filament describing a circle, the centre of which lies in the axis of the spindle. This angular movement of the arm may be used to indicate the contraction or expansion of the material, or to indicate the temperature of the material, or the strength of an electric current flowing through and heating it ; or to measure the force applied at the end of the filament which is attached to the material.

Or again, the movement of the arm may be employed to actuate a relay.

More than one filament may be employed, and the filament or filaments may be of conducting or non-conducting material.

For the purpose of regulating the sensitivity of the instrument it may be enclosed in a vessel which is open to the atmosphere : or this vessel may be either evacuated in order to increase the sensitivity, or filled with a conducting gas such as, for instance, hydrogen, for the purpose of reducing or controlling the degree of sensitivity.

Our invention is illustrated by the accompanying drawings, Figure 1 of which shows an instrument which is adapted for measuring an electric current and in which a spring is employed, while Figure 2 shows a similar instrument in which a system of weights is employed.

A is a spindle rotatably mounted on pivots B carried by a frame C so that the spindle is prevented from any movement parallel to its axis. D is an indicator arm fast on the spindle and E is a cross piece or arm also fast on the spindle. F, F are two rods or columns of the conducting material the expansion of which it is desired to measure, each having one end fixed with regard to the frame C and each being parallel to the axis of the spindle. G, G are two filaments having one end of each connected to the free ends of the columns F, while their other ends are connected to the cross piece E.

In Figure 1 the spindle is urged to rotate in one direction by a spring H, while in Figure 2 the spindle is urged to turn in one direction by weights I attached to cords J wound upon a pulley K fast on the spindle.

When an electric current is passed through the columns F they expand and

turn the spindle against the spring or weights, and the consequent movement of the arm D will give an indication of the extension of the columns or of the strength of the force causing such extension that is in this case of the current.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is :—

1. In a measuring instrument, the combination of a spindle capable of rotational movement but not of movement parallel to its axis, a piece of expansible material having one end fixed in relation to the spindle, an arm upon the spindle, a filament stretched between the arm and the free end of the piece of material and means for applying to the spindle a controlling force, substantially as described.

2. In a measuring instrument, the combination of a spindle capable of rotational movement but not of movement parallel to its axis, an indicator arm carried by the spindle, a pair of expansible rods each having one end fixed in relation to the spindle, a cross piece on the spindle, a pair of filaments each stretched between the cross piece and the free end of one of the rods and means for applying to the spindle a controlling force, substantially as described.

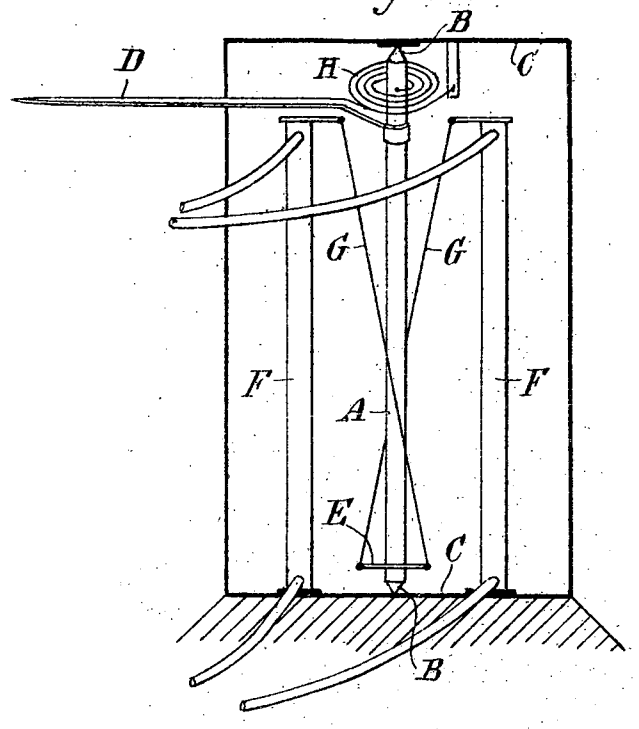
Dated the 1st day of January, 1917.

CARPMAEL & Co.,
Agents for Applicants,
24, Southampton Buildings, London, W.C.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1917.

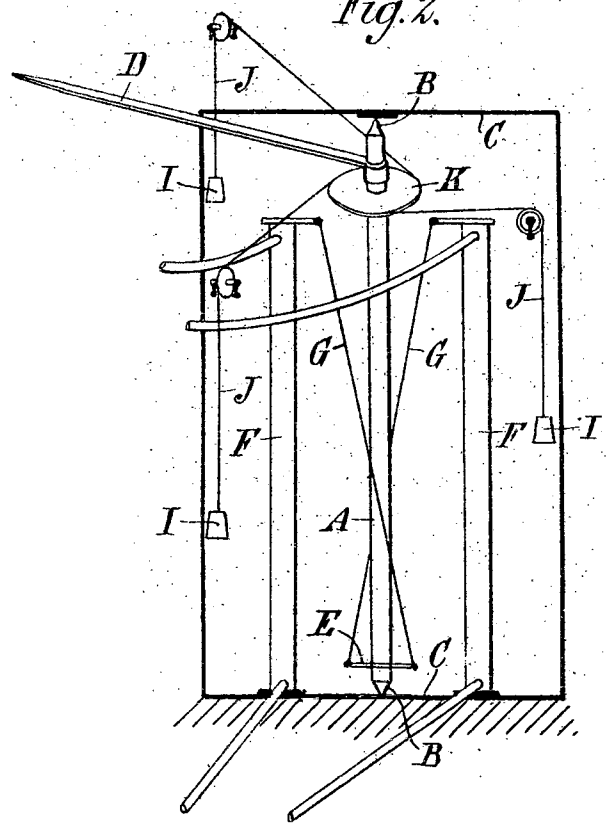
107,622. MARCONI'S WIRELESS TELEGRAPH CO. & *another's* COMPLETE SPECIFICATION.

Fig. 1.



[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 2.



All.

Malby & Sons, Photo-Litho.

COUPON. *The remitter may write here any communication to the payee.*

Re... 11 ... 8. re MARCONI'S WIRELESS TEL.CO.LD.

(Brit.No.107622 d/. 30/6/16)

(As per your letter of date). *Remitter.*

Received 3 £ 0s

AUG 1918

G.R.S. 29A] 3.Dft.

190

From G.M. 79.18-2

Secy. to the Govt. of His Highness
The Maharaja of Mysore,
Genl. and Rev. Dept.

To The State Sugar Treasury
Bangalore

Dated 10-10-18

Despatched

Received

General No. 3731

No.

Enclosure No. Nil

Has the honour to forward herewith a sum of Rs 10/- being the application fees received from messrs Remfrey and Son, Patent and Trade mark Attorneys, Calcutta for leave to file a specification of an Invention for "Improvements in Measuring Instruments, Relays and the like" by Marconi's Wireless Telegraph Company Ltd of Marconi House, Strand, London. W.C. 2. England and to request the favour of an acknowledgment.

By order

For Secy to Govt

7.10.18

7.10.18

GPB—10,000—9-4-06.

G.R.S. III—3]

ROUTINE NOTES.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

Duplicate.

(To be returned to the General and Revenue Secretariat for being placed in the file.)

1. No. 110 Genl 99-18-2
2. Date of Remittance 21-11-1918
3. From whom received Renfrew and Co. Calcutta
4. Date of receipt of amount in the General and Revenue Secretariat 1-8-1918
5. On what account Fee for leave to file a specification of an invention no 5918-1917 of marconis wireless telegraph co'ltd London
6. Amount (in figures and words) Rs 10/- Ten only
7. The head to which it should be credited.

(To be filled in by the Treasury.)

M Venkatesa Ayyar
Actg *Secretary to Government,*
General Department.

The above amount has been duly received and credited in the Treasury on this date.

Date 23-11-18

Hd. Acctt. *Treasurer.* *Try. Officer.*

N. B.—Both the counterfoil and the duplicate to be returned to the General and Revenue Secretariat duly signed by the Treasury Department.

N. B.—Should routine notes be written on small slips, the notes must be copied or slips pasted on this form.

G. R. S., VI.—s-v/16]

13

DRAFT.

3 Drafts

SUBJECT.....

.....

.....

Section. G. M
File No. 99-18
Serial No. 3

Diary No. of letter replied to....2218....

No. G 7216 Copy

To

The Registrar
Mysore University
Mysore

GENERAL AND REVENUE SECRETARIAT,
( )
, *the*.....*191* .

Date of issue....10-10-Bangalore

Signed by....Sri. T. C. T. Gupta

× the kindly returned with the reply

Has the honor to forward herewith for the opinion of Mr. E. P. Metcalfe B. Sc. Offg Principal Central College ~~for report~~ under Sec. 6, Cl. (2) of the Mysore Inventions and Designs Regulation, XI of 1894, an application for leave × to file a specification of an invention for

'Improvements in or relating to Instruments, Relays and the like' by Marconi's Wireless Telegraph Company Ltd. of Marconi House, Strand, London, W.C. 2 England.

By Order,

[illegible]

for Chief Secretary to Government.

10/10/18

G. R. S. VI—s-v/14]

Money Court

DRAFT.

3 Drafts

SUBJECT..... 15/11/18 .....

.....

.....

Section. Q M
File No. 99-18
Serial No. H

Diary No. of letter replied to 2218

G 7315 Revenue 4/11-8-0

GENERAL AND REVENUE SECRETARIAT
( )
, the ....*191* .

To

The Superintendent of
Stamps
Bangalore

Date of issue 10-10-18

Signed by Geo. T. P. Symes

Has the honor to forward herewith a Power of Attorney executed by Marconi's Wireless Telegraph Company Ltd. constituting Remfrey and Son, Patent Attorneys as Agents in respect of ~~his~~ their invention and also a deed of assignment by Harry Alexander Owen of Marconi House, Calcutta to Marconi's Wireless Telegraph Co. Ltd for leave to file a specification of an Invention for "Improvements in measuring Instruments, Relays and the like".

and to request that the same may be impressed with the Mysore General Stamp of the value of Rupee One and of annas eight also herewith forwarded, and the Power and assignment returned to this office.

By Order,

For Chief Secretary to Government.

P.C. 8/10/18

7/10-18.

15 J8984

Office of the Superintendent of
Stamps in Mysore, Bangalore, 16-11-18.

No.D.B.109/Encl.6.

For original see G.M.39-18-6

From

M.Sreenivasa Murti Esq.,
Superintendent of Stamps in Mysore.

G.M:99-18-5

To

C.S.Balasundaram Iyer, Esq., B.A.,
Chief Secretary to the Government of His Highness the
Maharaja of Mysore, Bangalore.

Sir,

I have the Honor to forward herewith Five Powers of Attorney and one Assignment Deed forwarded with your Nos. G.7237/G.M.40-18-3, G.7238/G.M.39-18-3, G.7315/G.M.99-18-4, G.7345/G.M.138-17-5 and G.7347/G.M.358-17-5 dated 10th and 11th October 1918, duly stamped as desired and to request the favour of an acknowledgment.

I have the honor to be
Sir,
Your most obedient servent,

Sd/- M.Sreenivasa Murti,
Superintendent of Stamps in Mysore.

Irish Comptroller's Commission

Power of Attorney.

GOVERNMENT OF MYSORE
RUPEE

In the matter of the Inventions and Designs Regulation, 1894, of the Government of Mysore, and in the matter of Marconi's Wireless Telegraph Company, Limited, of Marconi House, Strand, London, W.C. 2, England, Electricians, Assignees of Inventor.

We the above named Marconi's Wireless Telegraph Company, Limited, do hereby retain, constitute and appoint Rupert Dempster, Solicitor and Patent Agent, of Dempster & Son, of Calcutta, Bengal India Patent Attorneys as our Agent and Attorney, to apply for and obtain from the Government of Mysore, and keep in force, an Exclusive Privilege or Letters Patent for "Improvements in measuring instruments, relays and the like", and we authorise him to sign our name to such papers and writings, and do such acts regarding the same, including the appointment of a substitute or substitutes, as may be necessary or expedient.

Dated this 8th day of May 1918.

SOLICITOR & PATENT AGENT CALCUTTA RUPERT DEMPSTER

The common Seal of Marconi's Wireless Telegraph Company, Limited, was hereto affixed in the presence of

Alfonso Marconi
W. Bradfield
} Directors.

Henry W. Allen
Secretary.

Seal

Mysore
Asst Comptroller's
Assignment

17

Whereas I, Harry Alexander Ewen, of Marconi House, Strand, London, W.C. 2, England, Electrician, jointly with Marconi's Wireless Telegraph Company, Limited, of Marconi House, Strand, London, W.C. 2, England, Electricians, have obtained a grant of Letters Patent in the United Kingdom No. 107,622, dated the 30th day of June 1916, for "Improvements in "measuring instruments, relays and the like": And whereas the said Marconi's Wireless Telegraph Company, Limited, are desirous of obtaining a Patent in Mysore for the said invention in their own name: Now therefore, know ye, that for and in consideration of the sum of Five shillings to me in hand paid, the receipt of which is hereby acknowledged, I, the said Harry Alexander Ewen, have assigned and transferred, and by these presents do assign and transfer, unto the said Marconi's Wireless Telegraph Company, Limited, their successors and assigns, all my right, title and interest in and to an Exclusive Privilege or Letters Patent to be obtained for the said invention from the Government of Mysore, and all and singular the liberties, powers, privileges and advantages whatsoever appertaining or belonging thereunto, the same to be held and enjoyed by the said Marconi's Wireless Telegraph Company, Limited, their successors or assigns, for the full term for which such Exclusive Privilege or Letters Patent may be granted, or any prolongation or extension thereof, as fully and entirely as the same could have been held and enjoyed by me had this assignment not been made.

In witness whereof I the said Henry Alexander Ewen have hereunto set my hand and seal this 8th day of May 1918.

Signed Sealed and Delivered at London, England, in the presence of ... } Harry A. Ewen

Witnesses
George J. Gentz.
J. H. Whitehead

18

G. R. S. VI—G/32]

SUBJECT.....

.....

.....

Diary No. of letter replied to.....

GENERAL AND REVENUE SECRETARIAT,
(,)
, *the* 191 .

Date of issue.....12/12/18.....

Signed by.....Mr. M. V. Iyengar.....

archives
ne tr files

Section G. M.
File No. 99-18
Serial No. 6

No. G. 11216

To The Superintendent of Stamps
ee Mysore.

Sir,

~~With reference to~~ forwarded with
your letter No. J.B. 109 of 16. 11. 1918. ~~forwarding~~
five powers of Attorney and one
Assignment Deed I am directed to
acknowledge the receipt of the ~~same~~

I have &c

Mysore 4/12

For Chief Secy: to Govt.

30/11

4/12/18

over.

GBPM—1,500—17-1-19.

19

No. 6786

Encls (4)

Office of the Mysore University,

Dated Mysore, 7th February *191*9

Ch Secty
8 FEB 1919

135924

DIARY NO.....

FROM

THOS DENHAM, ESQ., M.A.,
Registrar, Mysore University,
Mysore.

CHIEF SECRETARIAT. IV MINOR Depts. 8 FEB 1919

57915

To

C.S. Balasundaram Iyer, Esq., B.A.,
Chief Secretary to the Government
of His Highness the Maharaja of Mysore,
Bangalore.

Sir,

With reference to your docket No.7314/G.M.99-18-3 date the 10th October 1918, I am directed to forward herewith a copy of letter No.439 dated 25th January 1919 from Mr. Metcalfe furnishing his opinion on the application for leave to file a specification of an invention for "Improvements in measuring instruments, Relays and the like" by Marconi's Wireless Telegraph Company Ltd., London.

The application with its enclosures is herewith returned.

I have the honour to be,

Sir,

Your most obedient servant,

Thos Denham

REGISTRAR.

MSR.

20

Letter No.439 dated 25th January 1919 from Mr. E.P. Metcalfe, to the Registrar, Mysore University, Mysore.

****

I have the honour to return herewith the application of Marconi's Wireless Telegraph Company, Ltd., London, for leave to file a specification of an invention for "Improvements in measuring Instruments Relays and the like"; and to state that after examining the said specification I am of opinion that the permission sought may be granted.

******

C O P Y.

REGISTRAR.

MSR.

21

To the Dewan of Mysore:

The application of Marconi's Wireless Telegraph Company, Limited, of Marconi House, Strand, London, W.C. 2, England, Electricians, for leave to file a specification under Part I of the Mysore Inventions and Designs Regulation, 1914.

1. The applicants, jointly with Harry Alexander Owen, of Marconi House, Strand, London, W.C. 2, England, Electrician, and of whom they are the Assignees, have obtained a Patent in the United Kingdom No. 107,622, dated and sealed as of the 30th day of June 1916, and actually sealed on the 29th day of September 1917, for "Improvements in "measuring instruments, relays and the like".

2. To the best of the information and belief of the applicants, the invention is new within the meaning of Part I of the Mysore Inventions and Designs Regulation, 1914, and no circumstance exists which, if the applicants are authorized to file a specification, and file it in accordance with that Part, will disentitle them to an Exclusive Privilege thereunder in respect of the invention.

3. The following is a description of the invention:—

ATTORNEYS & PATENT AGENTS
EMPRY & SON.
CHANCERY LANE

The object of this invention is to provide an instrument in which the effect of small extensions or contractions in any material may be multiplied for the purpose of measuring the extension or contraction or the strength of the applied stress, or for the purpose of controlling another instrument.

According to our invention, we mount upon a spindle a radial arm, which is capable of rotational movement but is restrained from movement parallel to the axis of the spindle. The arm is subject to a controlling force, such as that of a spring or a weight, which tends to prevent movement in one direction round the axis and assists movement in the other direction. To the arm, or to another arm fast on the spindle, is connected one end of a filament, the other end of which is connected to one end of the piece of material of which we desire to measure the extension or contraction, the other end of said piece being fixed in such a manner that no appreciable movement between it and the bearing supporting the spindle is possible.

If the material contract or expand the arm will turn about the axis, the point of attachment between the arm and the filament describing a circle, the centre of which lies in the axis of the spindle. This angular movement of the arm may be used to indicate the contraction or expansion of the material, or to indicate the temperature of the material, or the strength of an electric current flowing through and heating it; or to measure the force applied at the end of the filament which is attached to the material.

Or again, the movement of the arm may be employed to actuate a relay.

More than one filament may be employed, and the filament or filaments may be of conducting or non-conducting material.

For the purpose of regulating the sensitivity of the instrument it may be enclosed in a vessel which is open to the atmosphere: or this vessel may be either evacuated in order to increase the sensitivity, or filled with a conducting gas such as, for instance, hydrogen, for the purpose of reducing or controlling the degree of sensitivity.

Our invention is illustrated by the accompanying drawings, Figure 1 of which shows an instrument which is adapted for measuring an electric current and in which a spring is employed, while Figure 2 shows a similar instrument in which a system of weights is employed.

A is a spindle rotatably mounted on pivots B carried by a frame C so that the spindle is prevented from any movement parallel to its axis. D is an indicator arm fast on the spindle and E is a cross piece or arm also fast on the spindle. F, F are two rods or columns of the conducting material the expansion of which it is desired to measure, each having one end fixed with regard to the frame C and each being parallel to the axis of the spindle. G, G are two filaments having one end of each connected to the free ends of the columns F, while their other ends are connected to the cross piece E.

In Figure 1 the spindle is urged to rotate in one direction by a spring H, while in Figure 2 the spindle is urged to turn in one direction by weights I attached to cords J wound upon a pulley K fast on the spindle.

When an electric current is passed through the columns F they expand and turn the spindle against the spring or weights, and the consequent movement of the arm D will give an indication of the extension of the columns or of the strength of the force causing such extension that is in this case of the current.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:-

1. In a measuring instrument, the combination of a spindle capable of rotational movement but not of movement parallel to its axis, a piece of expansible material having one end fixed in relation to the spindle, an arm upon the spindle, a filament stretched between the arm and the free end of the piece of material and means for applying to the spindle a controlling force, substantially as described.

2. In a measuring instrument, the combination of a spindle capable of rotational movement but not of movement parallel to its axis, an indicator arm carried by the spindle, a pair of expansible rods each having one end fixed in relation to the spindle, a cross piece on the spindle, a pair of

filaments each stretched between the cross piece and the free end of one of the rods and means for applying to the spindle a controlling force, substantially as described.

4. The applicants, therefore, apply for leave to file a specification of the invention pursuant to Part I of the Mysore Inventions and Designs Regulation 1894.

The Common Seal of Marconi's Wireless Telegraph Company, Limited, was hereto affixed in the presence of . . . . . .

Seal

Directors.

Secretary.

I, Henry William Allen, Secretary of Marconi's Wireless Telegraph Company, Limited, the applicants above named, do declare that the facts stated in the above application are true to my knowledge, except as to matters stated on information and belief, and as to those matters I believe them to be true.

Dated this 8th day of May 1918.

Gl 8102

G. M. 99-18-8

G. R. S.VI—S.-V/21]

Government of Mysore.

GENERAL DEPARTMENT.

Register No. 5 ..... of 1918-19

Bangalore, the 7/1/1919.

WHEREAS an application, dated the 30th July 1918 and received on the 8th August 1918, has been submitted under Section 5 of the Mysore Inventions and Designs Regulation, 1894, by Marconi's Wireless Telegraph Company Limited of Marconi House, Strand, London W.C.2 England, Electricians, assignees of Harry Alexander Even, of Marconi House Strand London W.C.2 England (hereinafter referred to as "the applicant") for leave to file a specification of an invention for "Improvements in measuring Instruments, relays and the like"

And whereas the applicant has duly complied with all the requirements of Section 5 of the said Regulation;

The Government of Mysore are pleased, under Section 6 of the said Regulation, to authorize the applicant to file a specification of the said invention in accordance with the provisions of the said Regulation.

ORDERED, that the applicant be, and he is hereby, informed accordingly.

By Order of the Government of Mysore,

Rec'd 14.2.19

For Chief Secretary to the Govt. of Mysore,
~~General Department.~~

Certified that the fees prescribed in the fourth schedule to the Mysore Inventions and Designs Regulation, 1894, in respect of the application for leave to file the said specification and of the filing thereof have been paid by the applicant, and that the specification hereinbefore described has been duly filed in accordance with the provisions of Section 8 of the said Regulation on this the twenty-fourth day of March 1919.

Draft Forchg

Secretary to the Govt. of Mysore,
~~General Department.~~

(Section 8 of the Inventions and Designs Regulation, 1894.)

8. (1) If within six months from the date of an order under Section 6, Sub-Section (1), or within such further time, not exceeding three months, as the Government of Mysore, in its discretion, may, on cause shown to its satisfaction and on payment of the fee prescribed in that behalf in the fourth schedule, see fit to allow, the applicant causes a specification of his invention to be filed in manner by this Part required, and the fee prescribed in the fourth schedule in respect of the filing of the specification to be paid, the applicant shall, subject to the other provisions of this Part, be entitled to the exclusive privilege of making, selling and using the invention in the Territories of Mysore, and of authorizing others so to do, for a term of fourteen years from the date of the filing of the specification.

(2) But an exclusive privilege in respect of an invention of a new manufacture shall, notwithstanding anything in Sub-Section (1), cease, if the inventor fails to pay, within the time limited in that behalf by the fourth schedule, any fee prescribed in that schedule in respect of the continuance of the privilege.

(3) If, nevertheless, in any case, by accident, mistake, or inadvertence, an inventor fails to pay any such fee within the time so limited, he may apply to the Government of Mysore for an enlargement of the time for making the payment.

(4) Thereupon the Government of Mysore may enlarge the time accordingly, on payment of the fee prescribed in that behalf in the fourth schedule, and subject to the following conditions, namely :—

(*a*) the time for making a payment shall not in any case be enlarged for more than three months ; and

(*b*) if any suit is instituted in respect of an infringement of the exclusive privilege committed after a failure to make a payment within the time limited for the making thereof and before the enlargement of that time, the Court disposing of the suit may, if it thinks fit, refuse to award or give any damages in respect of the infringement.

W D 02300—GPB—500—24-11-16

G. R. S. VI—s-v/13] 18/V 20 Drafts

DRAFT.

SUBJECT.....

.....

.....

Section. fw
File No. 99-18
Serial No. 9

No. G 18703 one

Diary No. of letter replied to....13524..

To

Messrs Rowfrey and Son
Patent & Trademark Attorneys
Calcutta

GENERAL AND REVENUE SECRETARIAT,
( )
, *the*.....*191*

GENTLEMEN,

With reference to your letter No. nil
dated the 30th July 1918.
I am directed to forward herewith G. O.
No. G. 18007 / G. M. 99-18-8 dated the 21/2/19
191 , authorizing Marconi's Wireless Telegraph Company Ltd of Marconi House Strand London W.C 2. England assignees of Harry Alexander Owen of Marconi House Strand, London, W.C 2. England
to file a specification of an invention for
"Improvements in measuring Instruments, Relays and the like"
and to request that the fact may be communicated to the party concerned.

I have, etc.

Date of issue 21/2/19

Signed by [illegible]

Rec 14.2.19

[illegible]
for Chief Secretary to Government.

12-2-1919

No. 11876.

REGISTERED.

G.M-99-18-1.

To

THE ~~CONTROLLER OF PATENTS~~, SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE~~, GENL & REV. DEPTS.,
~~CALCUTTA~~. BANGALORE,
MYSORE.

SECRETARIAT
IV
MYSORE
24 MAR 1919

FROM REMFRY & SON,
PATENT & TRADE-MARK ATTORNEYS,
CALCUTTA.

Dated CALCUTTA, the 19th March 1919.

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats.(Genl)			

SIR, 64

re MARCONI'S WIRELESS TEL:CO.LD. (MYSORE)
No. 5/18-19 dated -
(Brit. *No.* 107622 *dated* 30/6/16.)

Pursuant to the Order granting leave in this matter dated 21st February 1919, Register No. 5 of 1918-19, we have the honour to forward herewith 4 copies of the Specification of MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED, of Marconi House, Strand, London, W.C.2., England, Electricians, in respect of their Invention for "IMPROVEMENTS IN MEASURING INSTRUMENTS, RELAYS AND THE LIKE".

The abovementioned Order is enclosed and we solicit the favour of your fillingin the Certificate at foot thereof and having same signed.

A Post Office Order for Rs. 30/- is sent today.*

We have the honour to name our Office in Calcutta as the Address for Service under the Act.

We have the honour to be,
Sir,
Your very obedient servants,

REMFRY & SON

*Part of P.O.O. for Rs.90/-.

Enclos:-
4 Specns.
Order.

I.M.B.

P/O (Genl.) 1,000—7-6-18 [4-2-14—17-3-11].

Jm 99-18-1

Duplicate.

(To be returned to the General and Revenue Secretariat for being placed in the file.)

1. No. 147

2. Date of Remittance 26-3-1919

3. From whom received Messrs Lenfesty & Son Patent and Trade mark Attorneys, Calcutta

4. Date of receipt of amount in the General and Revenue Secretariat 26-3-1919

5. On what account Filing fees in respect of Govt. No. S. 7. 1915-19 & marconis wireless Tel Co Ltd

6. Amount (in figures and words) Rs 30/-
Rupees Thirty only

7. The head to which it should be credited.

(To be filled in by the Treasury.)

Secretary to Government,
General Department.

The above amount has been duly received and credited in the Treasury on this date.

Date 31/3/19

Hd. Acctt. Treasurer. Try. Officer.

N. B.—Both the counterfoil and the duplicate to be returned to the General and Revenue Secretariat duly signed by the Treasury Department.

33

30, aug 19

2 copies Please mark one more copy

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE.

GENERAL AND REVENUE SECRETARIAT

No. L22769

Bangalore, Dated 7-4-1919

E. Dn. 99-18—12

NOTIFICATION.

(PATENT)

The following specification of an invention has been filed in accordance with Sections 8, 9, 10 and 11 of Regulation XI of 1894 (The inventions and Designs Regulations) and is open to inspection at the Mysore Government Secretariat on application to the Chief Secretary to the Government of His Highness the Maharaja of Mysore, and on payment of a fee of one Rupee.

By Marconi's Wireless Telegraph Company Limited of Marconi House, Strand London W.C.2 England, Electrician Engineer of Harry Alexander Brown, of Marconi House Strand, London WC 2 England.

"Improvements in measuring Instruments Relays and the like."

By Order,

29-3-19

For *Chief Secretary to Government.*

27/3/19

To

The Compiler, Mysore Gazette, for publication.

34

G. R. S. VI—s-v/18

DRAFT. 3 drafts

SUBJECT.....

.....

.....

No.

Section. fm
File No. 99-18
Serial No. 13

Diary No. of letter replied to 16826

o

GENERAL AND REVENUE SECRETARIAT
( )
the.....*191* .

£2270(2)

To

Messrs Remfrey & Son
Patent & Trademark Attorneys
Calcutta

Date of issue 7-4-19

Signed by [illegible]

Sir,

With reference to your letter dated 19-3-19 I am directed to forward copy of a Notification No..... dated..... issued by this Government in regard to the invention filed by you under Regulation XI of 1894 (The Inventions and Designs Regulations.) & to request that the fact may be intimated to the party concerned

The order granting permission to file specification is herewith returned, with the certificate at foot, duly filled in and signed.

I have, etc.,

29/3/19

Secretary to Government.

29/3/19

G. R. S. VI.—s-v/12]

DRAFT.

SUBJECT.....

.....

.....

Section. Gn
File No. 99-18
Serial No. 14

Diary No. of letter replied to...1676...

No. S.2771-3

one block

GENERAL AND REVENUE SECRETARIAT,

( )

, *the*.....191

(1) *The Superintendent, Govt. Museum.*
(2) *The Chief Engineer of Mysore.*
(3) Registrar, Mysore University, Mysore

Date of issue.....7.4.19

Signed by.....

Has the honor to forward herewith for record in his office copy of a specification of an invention for "Improvements in measuring Instruments, Relays and the like" by "Marconi's Wireless Telegraph Company Limited, of Marconi House, Strand London. W.C. 2, England. Electricians, Assignees of Harry Alexander Brown, of Marconi House, Strand London W.C. 2. England

By Order,

29-3-19

Secretary to Government.

27/3/19